

BOGEN[®]

COMMUNICATIONS, INC.

PAGING SPEAKERS

MODELS SP15-8A, SPT-15A, SP30-8A, AND SPT-30A

The Bogen paging speakers are compact, high-intelligibility, double re-entrant horn-type loudspeakers suited for indoor and outdoor use with sound, signalling, and intercom equipment. Constructed with sturdy weatherproof material, the loudspeakers are recommended for voice paging applications in schools, industrial, commercial and recreational areas. Screw terminal connections eliminate the need for soldering or splicing.

The Models SP15-8A and SP30-8A have a power rating of 15- and 30-watts, respectively, with an impedance of eight ohms. The Models SPT-15A and SPT-30A provide a variable-tap impedance selector, which is a seven-position switch for matching the speaker power requirements to either a 25V or 70V constant-voltage line. A simple screwdriver adjustment sets the speaker power to the desired value from either a 25- or a 70-volt line.

INSTALLATION

SETTING THE VARIABLE TAP

SELECTOR SWITCH (SPT-15A and SPT-30A ONLY)

A slotted shaft, located along the base of the horn, is used to operate a 7-position selector switch. Remove the plastic cover and set the switch for the desired wattage at the specified speaker line voltage (25V or 70V). Adjust the switch by turning the slotted shaft until the end of the slot *which is opposite the flat on the shaft* points to the desired number. The wattage provided at each selector number is shown on the decal affixed to the rear of the driver and in Table II below.

TABLE I
SPEAKER SPECIFICATIONS

Speaker	SP15-8A	SPT-15A	SP30-8A	SPT-30A
Power Rating (RMS):	15 Watts continuous*	30 Watts continuous*	20 Watts equalized**	40 Watts equalized**
Frequency Response:	275Hz to 14,000Hz		225 Hz to 14,000Hz	
Impedance:	8 ohms	Adjustable @ 25V to 45,89,33,666, or 1300 ohms; @ 70V to 333,666,1300,2500 or 5000 ohms	8 ohms	Adjustable @ 25V to 45,89,167, or 333 ohms; @ 70V to 167,333,666,1300, or 2500 ohms
Dispersion:	110°		100°	
Sound Level [†] :	121dB		125dB	
Magnet:		Ferrite		
Finish:		Texturized Mocha Tan Epoxy Enamel		
Dimensions:	8" W x 8" H x 9" D (20.3 x 20.3 x 22.8cm)	10" W x 9-1/2" H x 10-1/2" D (25.4 x 24.1 x 26.6cm)		
Shipping Weight:	5 lbs. (2.27 kg)		6 lbs. (2.72 kg)	

* Integrated speech and music, full range.

** Limited to frequencies above horn cutoff.

† Measured four feet on axis at rated output.

CAUTION

Switch settings marked with an asterisk (*) must not be used. Failure to comply with these restrictions may cause damage to components and will void the warranty.

MOUNTING

1. Remove the mounting bracket from the speaker by completely removing the wing nut and the threaded screw.
2. Secure the bracket to the vertical or horizontal mounting surface; attach the speaker to the mounting bracket. Note that the horn may be mounted on a steel I-beam by passing one-half inch steel strapping through the holes in the mounting bracket.
3. Replace the threaded screw, position the speaker as desired, and hand-tighten the wing nut. *Do not use pliers or other tools.*

WIRING

Remove the plastic cover to expose the connecting screws. Strip the ends of the connecting wires about one-fourth inch and connect them to the terminals provided. The terminals are numbered to indicate phasing.

Provide cable strain relief by laying the cable within the recess on the casting and holding it tight with the plastic cover. The narrow recess is for zip or two-conductor cable; the wide recess is for shielded cable.

TABLE II
SELECTOR SWITCH SETTINGS
MODEL SPT-15A

Position	Watts (25V)	Z (Ohms)	Watts (70V)
1	*	5000	.9
2	*	2500	1.8
3	.48	1300	3.8
4	.94	666	7.5
5	1.8	333	15
6	7.5	89	*
7	15	45	*

* Forbidden switch settings (see text).

MODEL SPT-30A

Position	Watts (25V)	Z (Ohms)	Watts (70V)
1	*	2500	1.8
2	*	1300	3.7
3	*	666	7.5
4	1.8	333	15
5	3.7	167	30
6	7	89	*
7	15	45	*

* Forbidden switch settings (see text).